

## SCANNED DISPLAY WITH VARIATION COMPENSATION

### ABSTRACT OF THE INVENTION

A display apparatus includes a scanning assembly that scans about two or more axes, typically in a raster pattern. A light source emits light toward the scanning assembly such that the scanning assembly simultaneously scans more than one of the beams. The light source is positioned such that its beam illuminates a discrete region of the image field. The image may be formed from a set of "tiles" where a single sweep of the scanning assembly scans a plurality of beams simultaneously. Various approaches to controlling the intensity of the light to compensate for variations in light source response or optical system response, or to balance the response of a tiles system are described. Among these approaches are scaling data in a buffer, active multiplication, or control of a D/A converter.